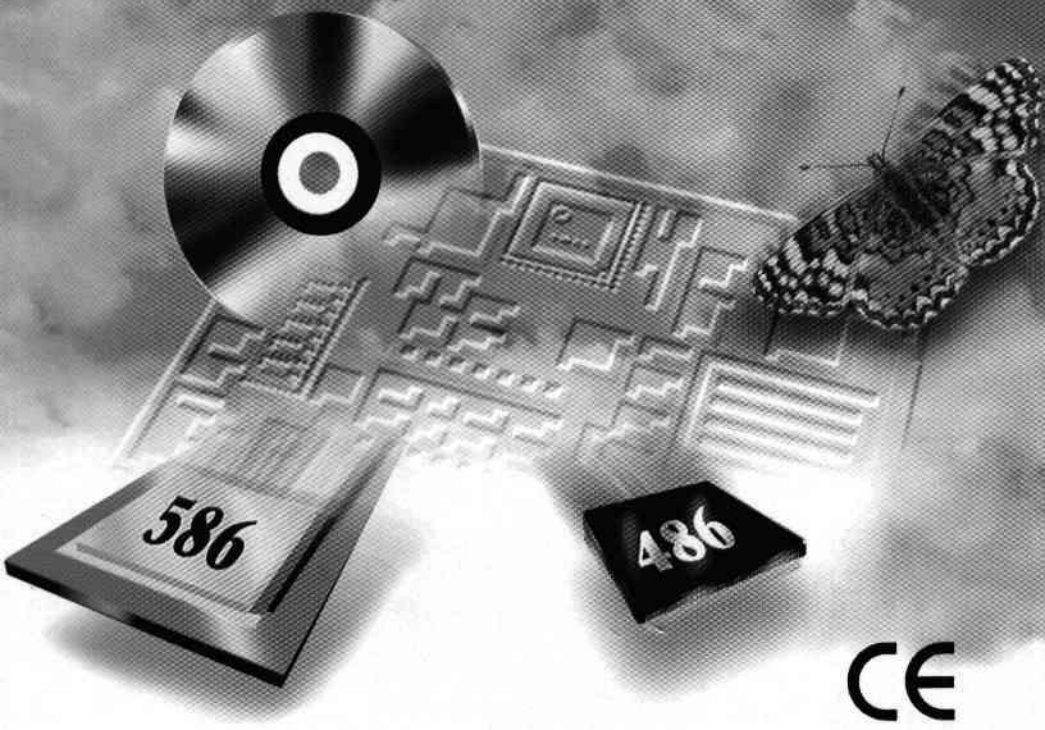
SIS 486 PCI/ISA MINI-SIZE SYSTEM BOARD

USER'S MANUAL

(VER : 2A)



CHAPTER 1: INTRODUCTION

1.1 OVERVIEW

THE PCI SIS 486 IS A MAIN BOARD DESIGNED FOR A FULL - FEATURED IBM PC/AT COMPATIBLE PERSONAL COMPUTER WHICH SUPPORTS INTEL/AMD/CYRIX... DX/DX2/DX4.EVEN THE LATEST WRITE BACK CPUs LIKE INTEL P24D/T, AMD 5x86,CYRIX 5x86..ETC. THIS MAIN BOARD IS FULLY COMPATIBLE WITH THOUSANDS OF SOFTWARE APPLICATIONS DEVELOPED FOR IBM PC/AT COMPUTERS.

THE HIGH PERFORMANCE PERIPHERAL COMPONENT INTERCONNECT (PCI) LOCAL BUS ALLOWS USER TO ADD ON CARDS TO SPEED UP I/O THROUGHPUT.

THE ON-BOARD FUNCTIONS LIKE A FLOPPY DISK CONTROLLER, IDE HARD DISK CONTROLLERS, SERIAL PORTS (16550), AND PARALLEL PORT (WITH EPP & ECP MODES) ALLOWS USER TO CONNECT PERIPHERAL DEVICES EASILY!

1.2 SPECIFICATIONS .

. 25-133 MHz INTEL/AMD/CYRIX/TI/SGS-THOMSON/IBM... 486DX/DX2/DX4, 3.3V/3.45V/4V/5V CPUs.
. 2 X 72-PIN SIMM SOCKETS, **SUPPORTS EDO MEMORY.**
. 3 X ISA AND 3 X PCI SLOTS.
. SIS 85C496 PCI/CPU MEMORY CONTROLLER AND SIS 85C497 AT BUS CONTROLLER CHIPSET.
. 128K/256K CACHE
. AWARD BIOS.
. ON BOARD 2 x PCI IDE DEVICES , 1 x FDC , 2 x SERIAL PORTS (16550 FAST COM), 1 x PARALLEL PORT DEVICE /EPP/ECP I/O FUNCTIONS.
. 22 CM x 19 CM.
. SUPPORTS GREEN FUNCTIONS.
. LITHIUM COIN BATTERY.

1.3 UNPACKING :

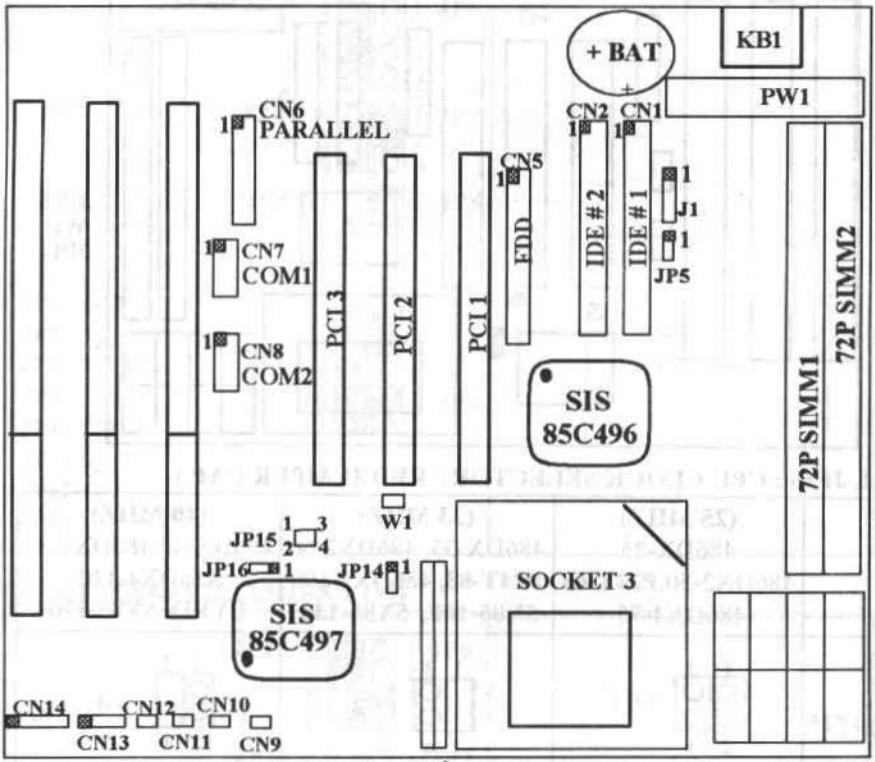
THE MAIN BOARD PACKAGE CONTAINS:

* PCI SIS 486 MAIN BOARD
* MANUAL
* CABLES
* DRIVERS DISKETTE

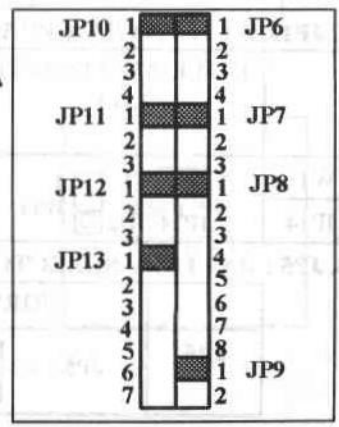
IF ANY OF THESE ITEMS IS MISSING OR DAMAGED,CONTACT THE DEALER FROM WHOM YOU PURCHASED. LEAVE THE PCI SIS 486 MAIN BOARD IN ITS ORIGINAL PACKING UNTIL YOU ARE READY TO INSTALL IT.

CHAPTER 2. INSTALLATION

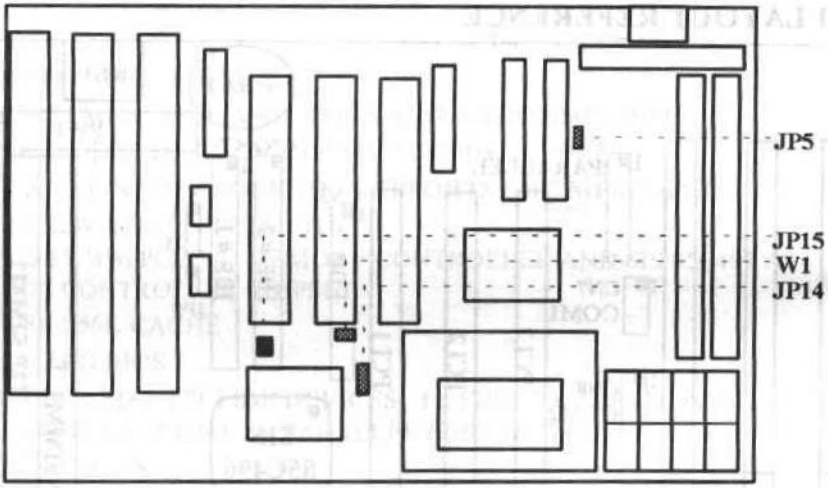
2.1 LAYOUT REFERENCE



CN9 : TURBO LED
CN10 : TURBO SWITCH
CN11 : HDD LED
CN12 : RESET
CN13 : SPEAKER
CN14 : KEYLOCK



2.2 JUMPER SETTINGS



1. JP15 : CPU CLOCK SELECTOR (RED JUMPER CAP)

	(25 MHZ) 486DX-25 486DX2-50,**P24T-63** 486DX4-75	**(33 MHZ)** 486DX-33, 486DX2-66 **P24T-83,** 486DX4-100 **5X86-100, 5X86-133**	**(40 MHZ)** 486DX-40,486DX2-80 486DX4-120 CYRIX 5X86-120
JP15	1 3 2 4 OFF	1 3 2 4 1-2	1 3 2 4 3-4

2. JP14,W1 : 3V/4V/5V CPU VOLTAGE SELECTOR (YELLOW JUMPER CAP)

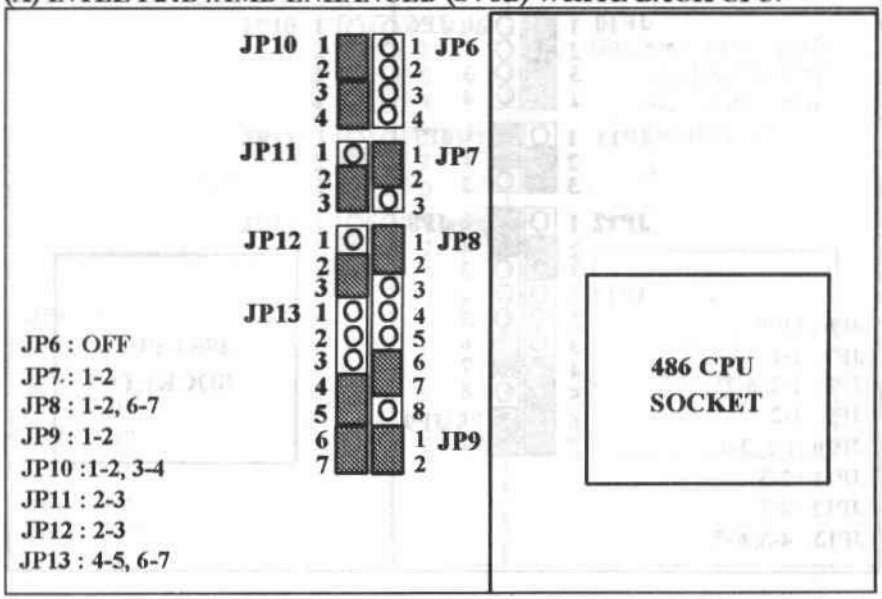
	INTEL/AMD/Cyrix/TI **(3V)**	Cyrix DX2-80 **(4V)**	**ALL 5V CPU & P24T-63/83 486 ODP**
W1 JP14	1 W1 1 JP14 JP14 : 1-2	1 W1 1 JP14 JP14 : 2-3	1 W1 1 JP14 W1 : ON

3. JP5 : BATTERY SELECTOR (BLACK JUMPER CAP)

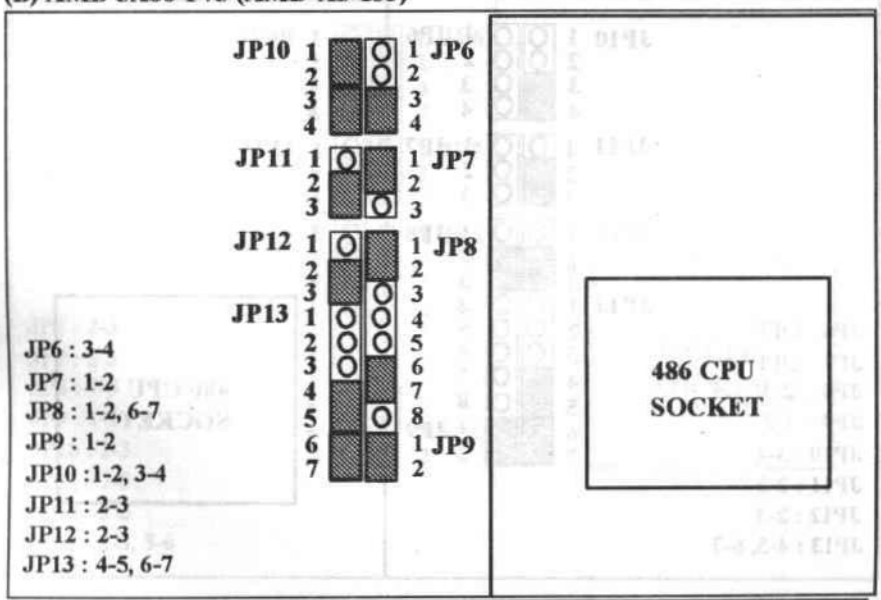
	NORMAL	RTC DISCHARGE
JP5	JP5 : 1-2 1 JP5	JP5 : 2-3 1 JP5

4. JP6-JP13 CPU TYPE SELECTOR (YELLOW JUMPER CAP)

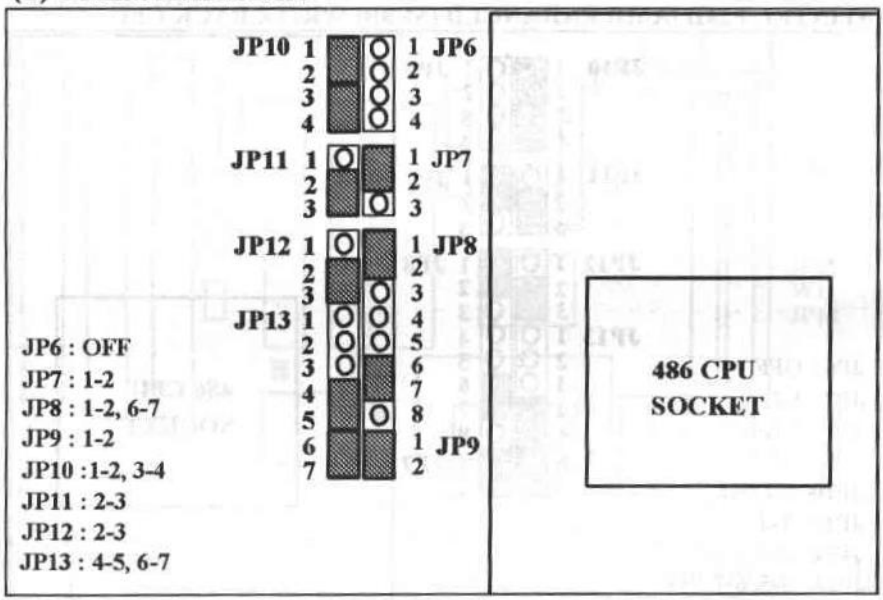
(A) INTEL P24D /AMD ENHANCED (SV8B) WRITE BACK CPU.



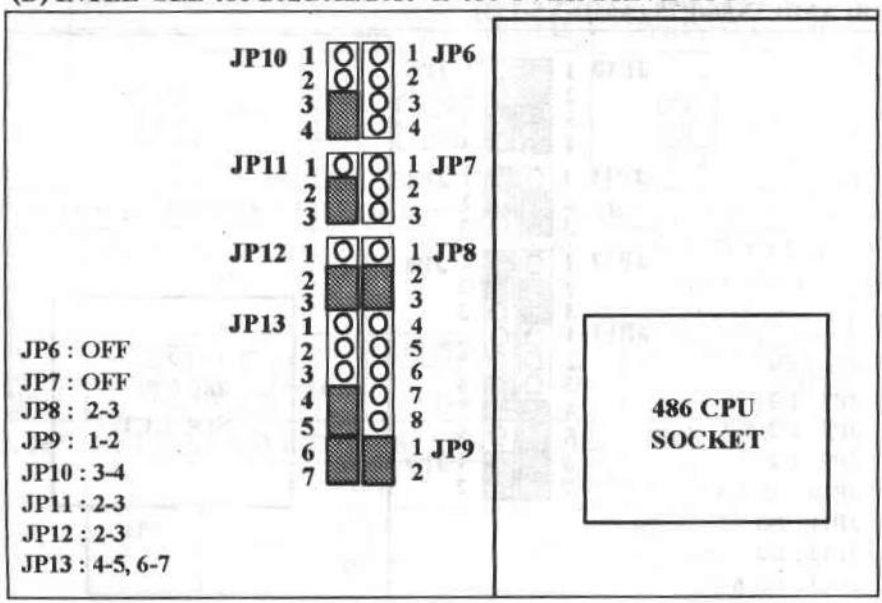
(B) AMD 5X86-P75 (AMD-X5-133)



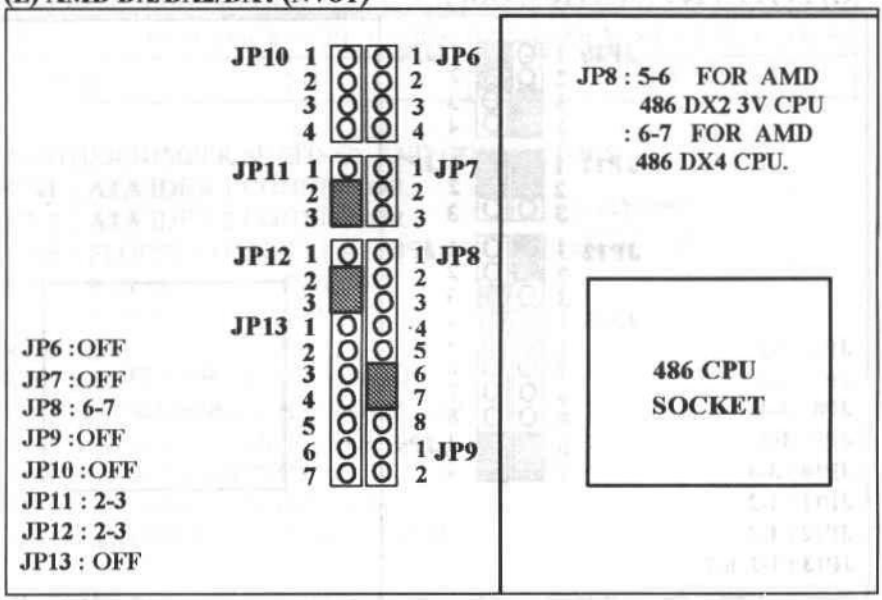
(C) CYRIX/ST/IBM 5X86



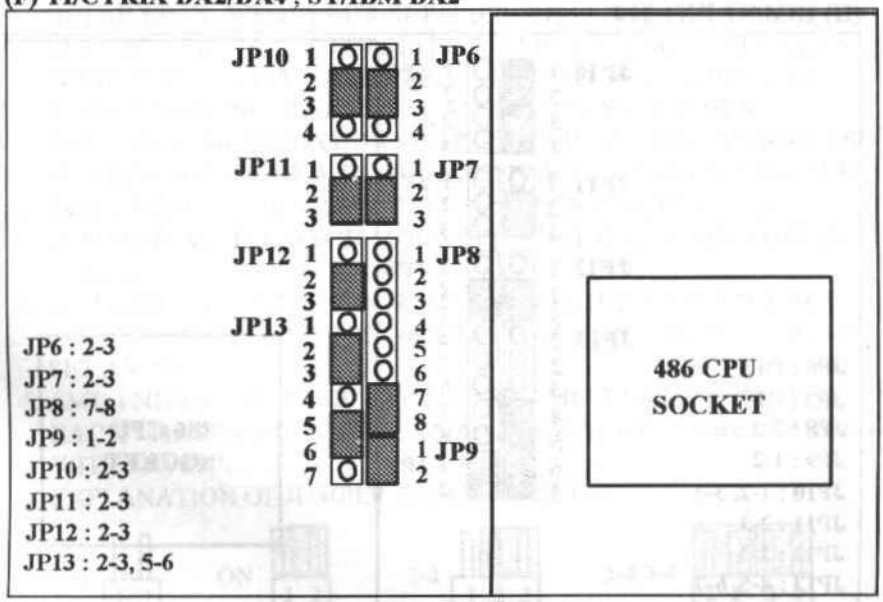
(D) INTEL -SLE 486 DX/DX2/DX4 & 486 OVER DRIVE CPU



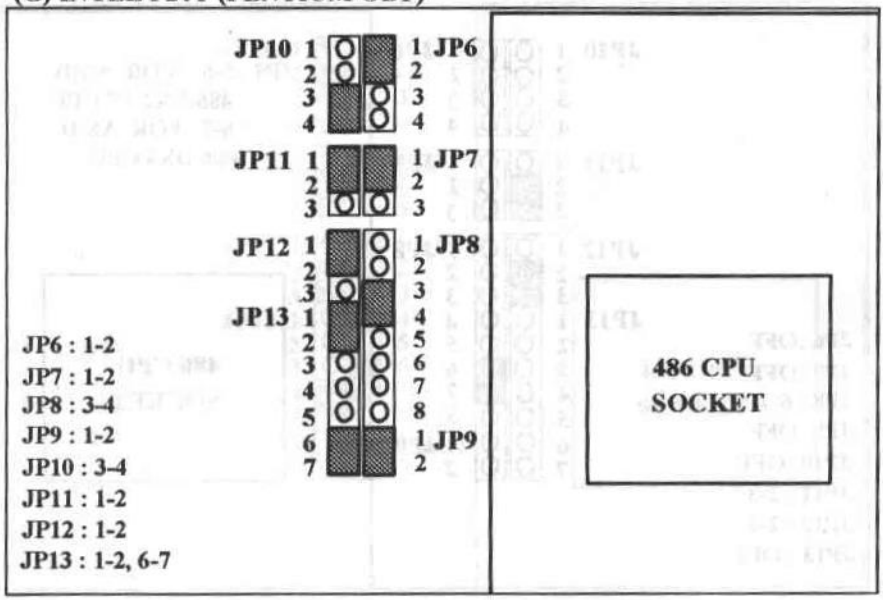
(E) AMD DX/DX2/DX4 (NV8T)



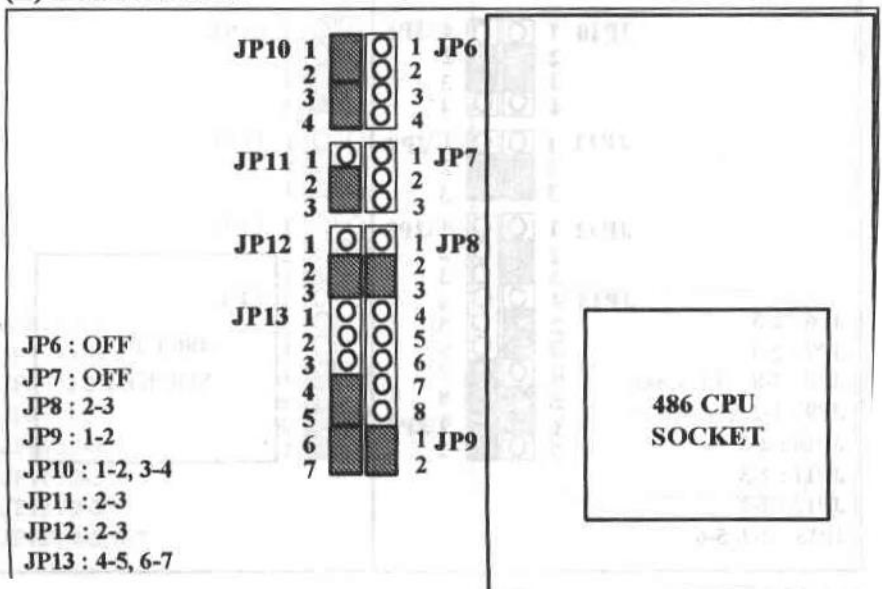
(F) TI/CYRIX DX2/DX4 , ST/IBM DX2



(G) INTEL P24T (PENTIUM ODP)



(H) IBM/ST DX4-100



5. JP16 : PCI BUS CLOCK SELECTOR

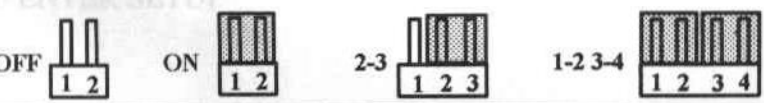
	PCI CLOCK= CPU CLOCK	PCI CLOCK = 1/2 CPU CLOCK
JP16	2-3	1-2

6. OTHER JUMPER SETTINGS AND CONNECTORS :

CN1 : ATA IDE # 1 CONNECTOR.
CN2 : ATA IDE # 2 CONNECTOR.
CN5 : FLOPPY CONNECTOR.
CN6 : PARALLEL CONNECTOR.
CN7 : COM1 CONNECTOR.
CN8 : COM2 CONNECTOR.
CN9 : TURBO LED CONNECTOR.
CN10 : TURBO SWITCH CONNECTOR.
CN11 : HDD LED CONNECTOR.
CN12 : RESET CONNECTOR.
CN13 : SPEAKER CONNECTOR.
CN14 : FRONT PANEL CONNECTOR.

REMARKS

1. BEFORE INSTALL A CPU ON MAIN BOARD,YOU NEED TO CHECK DETAILEDLY WITH YOUR SUPPLIER WHAT'S CPU CLOCK, VOLTAGE , MODEL..THEN REFER TO ABOVE JUMPER SETTINGS FROM POINT 1 TO 3 CAREFULLY. PLEASE NOTE IMPROPER JUMPER SETTING WILL CAUSE SYSTEM TO SHUTDOWN.
2. INTEL -**SLE 486 DX/DX2/DX4/ODP** (OVER DRIVE PROCESSOR) ARE MARKED WITH **"& E XXXX"** WHICH SUPPORT GREEN FUNCTION.
3. INTEL **P24D** CPU IS MARKED WITH **"& E W XXXX"** WHICH SUPPORTS **WRITE-BACK** MODE INTERNAL CACHE AND GREEN FUNCTION.
4. **P24T-63/83** ARE INTEL PENTIUM ODP CPUs HAVE ON PACKAGE 237 PINS AND 3.3V/5V VOLTAGE REGULATION. MAIN BOARD IS SET AS **"5V"**.
5. AMD ENHANCED **"SV8B"** SERIES ARE AMD'S LATEST **"WRITE-BACK"** TECHNOLOGY CPUs. AMD NORMAL CPUS ARE ,MARKED WITH **"NV8T"**.
6. EXPLANATION OF JUMPER SETTING STATUS



2.3 MEMORY CONFIGURATION

This section provides information on how to install the DRAM. Improper installation of DRAM will cause the system to shutdown.

There are no jumpers for the DRAM configuration. The BIOS will test the DRAM type and size automatically. There are two -banks from SIMM1 to SIMM4 on main board. please follow SIMM1-2 to install memory. DRAM speed must be 70ns or faster. Both parity (x36) or non-parity (x32) are acceptable.

TOTAL	SIMM1	SIMM2
4MBytes	4MB	—
4MBytes	—	4MB
8MBytes	4MB	4MB
8MBytes	8MB	—
8MBytes	—	8MB
12MBytes	8MB	4MB
12MBytes	4MB	8MB
16MBytes	8MB	8MB
16MBytes	16MB	—
16MBytes	—	16MB
20MBytes	4MB	16MB
24MBytes	8MB	16MB
32MBytes	16MB	16MB
32MBytes	32MB	—
32MBytes	—	32MB
64MBytes	32MB	32MB
128MBytes	64MB	64MB